

We claim:

1. A method for identifying an agent which modulates an FSH or FSH
5 Mimetic influenced cellular process or response, the method comprising:

- a) exposing a sample of cells to FSH or FSH Mimetic;
- b) determining the level of expression in the sample of cells of one
or more FSH OR FSH Mimetic stimulated genes (Tables 1, 2, 3)
in the presence and absence of a selected agent; and
- 10 c) identifying that the agent modulates an FSH or FSH Mimetic
influenced cellular process or response when the expression of
the one or more FSH or FSH Mimetic stimulated genes in the
cell sample in the presence of the agent differs from the
expression of the one or more FSH or FSH Mimetic stimulated
genes in the absence of the agent.

2. A method for identifying an agent which modulates an FSH or FSH
Mimetic influenced cellular process or response, the method comprising:

- a) exposing a sample of cells to FSH or FSH Mimetic;
- 20 b) determining the activity in the sample of cells of the product of
one or more FSH or FSH Mimetic stimulated genes (Table 1, 2,
or 3) in the presence and absence of a selected agent; and
- c) identifying that the agent modulates an FSH or FSH Mimetic
influenced cellular process or response when the activity of the
product of the one or more FSH or FSH Mimetic stimulated
25 genes in the cell sample in the presence of the agent differs from

the activity of the product of the one or more FSH or FSH
Mimetic stimulated genes in the absence of the agent.

3. A method for identifying an agent which modulates an FSH or FSH
Mimetic influenced cellular process or response, the method comprising:

- a) providing a sample of cells;
- b) determining the level of expression in the sample of cells of
one or more FSH or FSH Mimetic stimulated genes (Tables 1,
2, 3) in the presence and absence of a selected agent; and
- c) identifying that the agent modulates an FSH or FSH Mimetic
influenced cellular process or response when the expression of
the one or more FSH or FSH Mimetic stimulated genes in the
cell sample in the presence of the agent differs from the
expression of the one or more FSH or FSH Mimetic stimulated
genes in the absence of the agent.

4. A method for identifying an agent which modulates an FSH or FSH
Mimetic influenced cellular process or response, the method comprising:

- a) providing a sample of cells;
- b) determining the activity in the sample of cells of the
product of one or more FSH or FSH Mimetic stimulated
genes (Table 1, 2, or 3) in the presence and absence of a
selected agent; and
- c) identifying that the agent modulates an FSH or FSH
Mimetic influenced cellular process or response when the
activity of the product of the one or more FSH or FSH

Mimetic stimulated genes in the cell sample in the presence of the agent differs from the activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the absence of the agent.

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5. A method for detecting or monitoring a cellular process or response that is influenced by FSH or FSH Mimetic, the method comprising:

- a) obtaining a sample of cells from a patient;
- b) determining the level of expression in the sample of cells of one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, 3); and
- c) identifying that the cells in the sample of cells obtained from the patient are undergoing a cellular process or response that is influenced by FSH or FSH Mimetic when the level of expression of the one or more FSH or FSH Mimetic stimulated genes in the cell sample is increased relative to the level of expression of the one or more FSH or FSH Mimetic stimulated genes in a control the sample.

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6. A method for detecting or monitoring a cellular process or response that is influenced by FSH or FSH Mimetic, the method comprising:

- a) obtaining a sample of cells from a patient;
- b) determining the level of activity in the sample of cells of the product of one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, 3);

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- c) identifying that the cells in the sample of cells obtained from the patient are undergoing a cellular process or response that is influenced by FSH or FSH Mimetic when the level of activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the cell sample is increased relative to the activity of the product of the one or more FSH or FSH Mimetic stimulated genes in a control the sample.

10 7. A method for assessing whether cells will be responsive to an agent which modulates an FSH or FSH Mimetic influenced cellular process or response comprising the steps of

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- a) exposing a sample of cells obtained from a patient to a test agent;
- b) determining the level of expression in the sample of cells of the one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, and 3) in the sample exposed to the agent and in a sample of cells that is not exposed to the agent; and
- 20 c) determining that the cells will be responsive to the agent when 20 expression of the one or more of the FSH or FSH Mimetic stimulated genes is altered in the presence of the agent.

25 8. A method for assessing whether cells will be responsive to an agent which modulates an FSH or FSH Mimetic influenced cellular process or response comprising the steps of

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- a) exposing a sample of cells obtained from a patient to a test agent;
 - b) determining the level of activity of the product of the one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, and 3) in the sample of cells exposed to the agent and in a sample of cells that is not exposed to the agent; and
 - c) determining that the cells will be responsive to the agent when activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the cell sample in the presence of the agent differs from the activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the absence of the agent.
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9. A method for modulating an FSH or FSH Mimetic influenced cellular process or response, the method comprising administering a compound which alters the expression or activity of an FSH or FSH Mimetic stimulated gene (Tables 1, 2, 3).

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10. The method of claim 10 wherein said compound is a FSH or FSH Mimetic stimulated gene or the product thereof.

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11. A method of treating a reproductive disorder or disease in a mammal, comprising the administration of a therapeutically effective dose of FSH or an FSH mimetic which alters the expression or activity of an FSH or FSH mimetic stimulated gene (Tables 1, 2, 3).